HEXAGON

Case study

Integrated, intelligent solution protects bank headquarters

Erste Group Bank AG | *Austria*

Erste Group Bank AG was founded in 1819 as Erste Österreichische Spar Casse (First Austrian Savings Bank) and is headquartered in Vienna. In total, around 46,600 Erste Group employees look after over 15.8 million customers in more than 2,700 branches in seven countries. This makes Erste Group one of the largest financial services providers in Central and Eastern Europe.

The challenge

Erste built a new group headquarters on the site of the former Südbahnhof railway station in Vienna, with construction work taking place from 2012 to 2016. Employees who were previously distributed across 20 different locations throughout the city now all work in the same building complex. The advantages of this new arrangement are clear: closer proximity and improved infrastructure strengthen cooperation and provide a modern, pleasant working environment for employees.

The headquarters' groundbreaking, award-winning design by Vienna architects Henke Schreieck Architekten plays a key role by creating a feeling of openness with its curved buildings and integrated green spaces, producing an environment that encourages creativity. The highest construction standards were applied to the planning of the new building complex — which accommodates around 4,000 employees — in order to optimize cost-effectiveness by minimizing energy use and operating costs. The Erste Campus was awarded the DGNB (German Sustainable Building Council) platinum certificate for responsible, green building.

Security was also a major priority for the new headquarters. In 2014, the Erste Group put out a tender based on a detailed catalog of requirements for an overall building security concept for its campus. Among other things, the requirements included video surveillance and intelligent video analysis. The video technology needed to support security personnel, detect security-critical events in real time around the clock and, when necessary, raise an alarm immediately. To ensure smooth communication and quick responses, seamless integration was required between the video analysis application, the video management system and all other components and systems.

Fast facts

Vertical market
Finance/banking

Products
Qognify VMS
SAIMOS video analytics

The solution

Kapsch BusinessCom won the tender with an overall concept featuring video technology based Qognify VMS video management and a SAIMOS video analytics system. A key factor in the success of this solution was the close dovetailing of the two systems, made possible by the flexible architecture of Qognify VMS — which, for example, shares the image streams from cameras. Alarm events from the SAIMOS video analysis are seamlessly transferred to Qognify VMS, where they are visualized and processed.

Another major factor in the selection process was ensuring the video system complied with the high IT standards in the banking sector. This was verified in advance by extensive testing, and Qognify VMS supports encrypted communication between servers and clients, as well as secure connections with the cameras. The protection of customers' and employees' privacy is also crucial — SAIMOS employs algorithms to disguise people's identities in live images by using pixelization.

The result

After several months of implementation, installation and testing, the integrated overall system went into live operation at the end of 2015. Since then, the cameras distributed all over the campus have been protecting the buildings and grounds around the clock. To minimize the load on the network and the risk of failure, the cameras in Qognify VMS were distributed across multiple recording servers, which are connected to a central management server. Furthermore, the video streams are made available to the SAIMOS analytics directly.

The SAIMOS C3 server is responsible for the central management of external and internal communication with the distributed C3 nodes on which the video analysis is carried out. Cameras and alarms are visualized and processed using Hexagon software in the security control centre, which is manned 24/7. Camera images and views can also be displayed on a large-screen system using the Qognify VMS Display Agent in conjunction with a central control room solution.

The complete solution balances the high security requirements of a bank with the structural nature of the Erste Campus — the idea of openness is continued in the design of the interiors, which is why video technology is ideal as a relatively discreet security measure. The analysis algorithms of the C3 security portfolio from SAIMOS detect unauthorized access to indoor and outdoor areas, issue warnings regarding left objects and provide additional security in the area of access control. The intelligent system uses state-of-the-art techniques from the field of machine learning to effectively minimize false alarms as the operating time increases. Monitoring functions provide security personnel with real-time updates about the functional state of the SAIMOS video analysis so that can respond immediately if a problem arises.

The customer

Ing. Peter Hollenthoner, the staff member responsible for the implementation of the video project on the Erste campus, summed up the experience so far, saying, “Our security concept had to meet all of the security requirements in full without conflicting with the open room structures that enable collaboration, flexibility and meetings with customers. The only way to achieve the objectives was with intelligent video surveillance and analytics, which provide optimal support for the security process. We were keen to work with companies who understood our requirements and could provide us with the best possible technically stable implementation.”

Like the Erste Campus buildings, which are designed to allow changes in work processes or new work area allocations to be implemented at any point in the future without a major structural overhaul, the video system also has a flexible design and is well-equipped for the future. New video or analysis channels, as well as new functions, can easily be added to the existing system at any time.